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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,607

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Jianchang Ren

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05/14/2004

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EXAMINER

FISHMAN, MARINA

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,607

Applicant(s)

REN, JIANCHANG

Examiner

Marina Fishman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,10,11,13,14,17,21,24 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,10,11,13,14,17,21,24 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/25/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

General Status

1. This is a First Action on the Merits. Claims 1,2,5,6,10,11,13,14,17,21,24 and 28 are pending in the case and are being examined.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "the conductive component passes through the center of the container and substantially equally divides the container from the top to the bottom" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 2 is objected to because of the following informalities: lines 3 and 4 "of the container container and..." should be corrected as "of the container and...".

Claim 5 is objected to because of the following informalities: lines 6 and 7 word "coordinated" should be moved next to "mutually".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1,2,5,6,10,11,13,14,17,21,24 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The support for "the conductive component passes through the center of the container and substantially equally divides the container from the top to the bottom" is not found in the specification. The specification pages 13 – 15 and Figure 5 disclose conductive components 821 and 822 and magnetic components 831 and 832, however these components do not pass through the center of the container. Figures 7 and 8, disclose the conductive and magnetic components that pass through the center of the container, but do not equally divide the container from the top to the bottom.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 1,2,5,6,10,11,13,14,17,21,24 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 8 – 11, it is unclear what is meant by "the conductive component passes through the center of the container and substantially equally divides the container from the top to the bottom".

Claim 6, Applicant should clarify "a multi-layer **cylinder** structure".

Claim 10 depends from canceled claim 7, Claims 13 and 28 depend from canceled claim 4, and therefore are vague and indefinite. For the purpose of examination Examiner has assumed that Claims 10, 13 and 28 depend from Claim 1.

Claim 13 recites the limitations "**the multi-layer** cylinder of the magnetic field ..." in lines 3 and 4, and "**the multi-layer** cylinder of the conductive component...". There are insufficient antecedent basis for these limitations in the claim.

Claim 28 recites the limitation "the soft magnetic material" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

The Examiner has pointed out only few of the deficiencies, the Applicant is required to review all the claims and make necessary corrections.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Gorman et al. [US 4,117,288].

Gorman et al. disclose an integrated contact having: an arc proof component [42]; a conductive component and a magnetic field generating component and a container having an open top and bottom wherein the arc proof component, the conductive component and the magnetic field generating component are set in the container; the conductive component passes through the center of the container and substantially equally divides the container from the top to the bottom; the magnetic field generating component is isolated by the conductive component within the container, and the arc proof component is on top of the combination of the magnetic field generating component and the conductive component [Figures 1 – 4].

11. Claim 1, 2, 12, 15, 32, 36, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Komuro et al. [US 5,557,083].

Komuro et al. disclose an integrated contact having: disclose an integrated contact having: an arc proof component [12, 31, 41; a conductive component and a magnetic field generating component and a container having an open top and

bottom wherein the arc proof component, the conductive component and the magnetic field generating component are set in the container; the conductive component passes through the center of the container and substantially equally divides the container from the top to the bottom; the magnetic field generating component is isolated by the conductive component within the container, and the arc proof component is on top of the combination of the magnetic field generating component and the conductive component [Figures 3, 8 – 10].

Regarding Claim 2, Komuro et al. disclose the conductive component in the middle of the container, which equally divides the container into at least two parts from the top to the bottom of the container [Figures 3, 8 – 10].

Regarding Claim 5, Komuro et al. disclose front direction sections of the magnetic field generating and conductive components having a trapezium shape and are mutually coordinated [Figure 10].

Regarding Claims 10 and 13, Komuro et al. disclose the magnetic field generating component with a number of layers equal to a number of layers in the magnetic field generating component [Figures 1(b) and 3].

Regarding Claim 11, Komuro et al. disclose the magnetic field generating component and the magnetic field generating component with at least one layer.

Regarding Claim 21, Komuro et al. disclose the arc proof component is made of copper chromium alloy [Column 3, lines 50 - 55].

Regarding Claim 24, Komuro et al. disclose the conductive component made of copper powder [Column 12, lines 60, 61; Column 6, lines 8 - 21].

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 14 and 17, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Komuro et al. [US 5,557,083].

Regarding Claim 14, Komuro et al. disclose the instant claim invention except the container is made from rustles steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the container made from rustles steel, in order to prevent corrosion, since it has been held to within general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice [In re Leshin, 125 USPQ 416].

Regarding Claim 17, Komuro et al. disclose the arc proof component is a mixture of copper powder and chromium powder [Columns 3 - 10], however do not specify the exact ration of the copper powder and chromium powder as recited in the claim. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the ration of the copper powder and chromium powder from 10:90 to 90:10, in order to improve the reliability of the arc proof component, since it has been held that

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discovering an optimum value of a result effective variable involves only routine skill in the art [In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)].

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1,2,5,6,10,11,13,14,17,21,24 and 28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 7, 8, 12, 15, 19, 24, 29, 32, 36 of copending Application No. 10/648,727. Although the conflicting claims are not identical, they are not patentably distinct from each other because the all limitations recited in Claims 1,2,5,6,10,11,13,14,17,21,24 and 28 of the instant Application are substantially the same as all limitations recited in Claims 1, 2, 4, 7, 8, 12, 15, 19, 24, 29, 32, 36 of copending Application No. 10/648,727. All the elements and limitations recited in claims of the instant application are found in the various claims of the copending Application, such that combining them in different combinations would have been obvious in order to form product having

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the various different named elements with the same functions, or perhaps to vary the scope of the claims to avoid infringement or capture infringers.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion


16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hess et al. [US 4,935,588], Schels et al. [US 5,055,639], Mayo [US 5,777,287] all disclosed contact arrangements. Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marina Fishman
May 3, 2004


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